

DARK PATTERN BUSTER HACKATHON- (DPBH-2023)

Dark Patterns

In the rapidly evolving landscape of online commerce, dark patterns have emerged as a **threat** to the consumers who face escalating exploitation from these deceptive and manipulative design practices, by Big Tech firms for their benefits and specific business goals.

Dark Patterns are **unethical UI/UX (user interface/user experience) interactions**, designed to mislead or trick users to **make them do something they don't want to do**. Dark patterns **confuse** users, introduce **online obstacles**, make simple tasks time-consuming, have users sign up for unwanted services/products, and force them to pay more money or share more personal information than they intended.

In the current era of e-commerce people prefer to purchase everything online including food, clothing, medicine and daily requirements. This practice is spreading at a fast pace all over India and as a consequence dark patterns are trapping and misleading the consumers by manipulating their actions. With this increasing effect, **we have interest** in these dark patterns like **'limited users choice'**, **'Fake urgency & Scarcity'**, **'Hidden cost'**, **'user reviews'** which are commonly seen tricking users to make money.

In addition to above people search more information online which is available on different websites. This is less time consuming and effective. But while surfing **they are forced to create account or subscribe the website**. This is also a trick to take personal details of user which are getting shared on different platforms due to which they receive spam mails and fake calls.

To minimise the influence of emerging dark patterns we introduce **SMART CLICK**.

SMARTCLICK : Smart monitoring alert response techniques for common logical interpretable consumer knowledge.

SMARTCLICK represents a groundbreaking initiative designed to empower consumers by seamlessly integrating advanced machine learning (ML) algorithms into its real-time protection mechanisms. This system will dynamically analyses user interactions and choices on e-commerce websites, apps and other digital platforms, continuously monitors parameters such as clicks, navigation patterns, and transactional behaviour. **SMARTCLICK** ensures the real-time protection mechanism which will operate seamlessly in the background, to minimise the impact on the user experience. When ML

algorithms detect a potential dark pattern, the alert response mechanism is triggered, promptly notifying users with relevant information to make informed decisions during their online interactions.

To summarise, implementation of **SMARTCLICK**, with advanced machine learning will enable real-time analysis, adaptive learning, and proactive alerting. This comprehensive approach contributes to the creation of a user empowerment culture, providing effective protection against deceptive design practices in online commerce.